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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/716,537

11/20/2003

Kentaro Yokoi

009270-0306811

5242

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7590

11/20/2008

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EXAMINER

AKHAVANNIK, HADI

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

11/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/716,537

Applicant(s)

YOKOI, KENTARO

Examiner

HADI AKHAVANNIK

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-5 and 10-14 have been considered but are moot in view of the new ground(s) of rejection. Please see new rejection made with Igaki et al. (5109428) in view of Nagai et al. (2001/0019620).

See final rejection below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 11-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Igaki et al. (5109428, referred to as "Ig" herein) in view of Nagai et al. (2001/0019620, referred to as "Nagai" herein).

Regarding claim 1, Ig discloses an individual recognizing apparatus comprising: a data acquisition unit configured to acquire a plurality of certifying data from a recognized individual, the plurality of certifying data comprising attribute information associated with the recognized individual that is repeatedly acquired (see column 3 lines 40-50 and column 1 lines 41-52, which disclose that a plurality of frames of a fingerprint are acquired);

a detection unit configured to detect feature points from the plurality of certifying data acquired by the data acquisition unit (see column 3 line 62 to column 4 line 38 which discloses finding minutiae data for each of the image frames);

A change calculation unit configured to calculate the change in position of the like feature points detected from the plurality of certifying data by the detection unit (column 4 lines 12-38 which discloses comparing the frames feature points, this can also be seen in figures 5a-5d)

an aptitude judging unit configured to judge whether the plurality of certifying data acquired by the data acquisition unit are appropriate for the preparation of a certifying dictionary based on the change in the like feature points calculated by the change calculation unit, the plurality of certifying data being judged inappropriate if the change in like feature points is above and/or below at least one threshold value (see column 4 line 39 to column 5 line 23 which discloses only storing the data that is the higher confidence matched points);

a dictionary preparing unit configured to prepare a certifying dictionary with one or more certifying data of the plurality of certifying data that are judged by the appropriate aptitude judging unit and dictionary storing unit to store the certifying dictionary prepared by the dictionary preparing unit and a certifying unit configured to certify whether a recognized person is a proper person using the certifying data acquired by the data acquisition unit and the one or more certifying data in the dictionary stored in the dictionary storing unit (see column 5 lines 25 to 65 which discloses evaluating the data against a dictionary and transferring the data to store the

images should the data be verified as good data. Figures 6-8 also show this process in general steps)

Ig does not explicitly disclose that the images are based on changed in the direction of the face of the recognized individual.

Nagai discloses this feature in figure 7 and paragraphs 64-67. Here he discloses checking each image against a threshold to determine pose and obtaining additional pictures based on the result.

It would have been obvious at the time of the invention to one of ordinary skill in the art to include in Ig the multiple image acquisition means based on pose. The reason for the combination is because it makes for a more robust system that can acquire images of high quality and correct angles. Further both inventions are from the same field of biometric authentication.

Regarding claim 2 Nagai discloses calculating the angle changes in the rejection of claim 1 where he discloses finding changes in direction.

Regarding claim 3, the rejection of claim 1 discloses face images by Nagai.

Regarding claim 4, paragraph 16 of Nagai discloses finding eyes.

Regarding claim 5, the examiner takes official notice that it would have been exceedingly obvious at the time of the invention to one of ordinary skill in the art to include in Nakai and Ig a means restart the evaluation with the data is judged to be inappropriate. The reason is because it is well known to create a loop in the system when attempting to detect faces within an image.

Regarding claim 10, please see the rejection of claim 1 as it discloses all aspects of claim 10.

Regarding claim 11-14, these are the method claims of claims 2-5 and the rejection of claim 2-5 disclose all aspects of claim 11-14.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **HADI AKHAVANNIK** whose telephone number is (571)272-8622. The examiner can normally be reached on 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571-272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jingge Wu/
Supervisory Patent Examiner, Art Unit 2624

HA
11/14/08